

IN THE CLAIMS

Claims 1-3 (Canceled).

Claim 4 (Original): A mounting table, comprising:

a heating unit including a reflector plate made of an opaque quartz, and a quartz tube welded to a surface of the reflector plate, wherein a carbon wire which generates heat when a current is applied thereto is inserted in the quartz tube; and

a mounting table cover member installed to cover the whole quartz tube of the heating unit, a target object being mounted thereon, wherein the mounting table cover member is made of a light absorbing material.

Claim 5 (Original): The mounting table of claim 4, wherein the mounting table cover member is made of SiC.

Claim 6 (Original): A heat treatment apparatus, comprising:

a mounting table including a heating unit having a reflector plate made of an opaque quartz, and a quartz tube welded to a surface of the reflector plate, wherein a carbon wire which generates heat when a current is applied thereto is inserted in the quartz tube; and a mounting table cover member installed to cover the whole quartz tube of the heating unit, a target object being mounted thereon, wherein the mounting table cover member is made of a light absorbing material;

a processing chamber accommodating therein the mounting table;

a gas supply unit for supplying a gas in the processing chamber; and

a vacuum pumping system for evacuating the processing chamber.

Claim 7 (Currently Amended): The ~~heating unit~~ heat treatment apparatus of claim 6, wherein the quartz tube is bent.

Claim 8 (Currently Amended): The ~~heating unit~~ heat treatment apparatus of claim 6 ~~or 7~~, wherein the quartz tube is divided and welded to a plurality of zones on the surface of the reflector plate.

Claim 9 (Original): A heat treatment apparatus, comprising:

- a mounting table on which a target object is mounted;
- a processing chamber accommodating therein the mounting table;
- a gas supply unit for supplying a gas in the processing chamber;
- a vacuum pumping system for evacuating the inside of the processing chamber;
- a target object heating unit for heating the target object;
- an inner vessel installed in the processing chamber;
- a heating unit, installed between the inner vessel and an inner wall of the processing chamber, for heating the inner vessel,

wherein the inner vessel is made of a light absorbing material, and

the heating unit includes a reflector plate made of an opaque quartz, and a quartz tube welded to a surface of the reflector plate, a carbon wire which generates heat when a current is applied thereto being inserted in the quartz tube.

Claim 10 (Original): The heat treatment apparatus of claim 9, wherein the inner vessel is made of SiC.

Claim 11 (Currently Amended): The heat treatment apparatus of claim 9 ~~or 10~~, wherein the target object heating unit is integrally embedded in the mounting table.

Claim 12 (Currently Amended): The ~~heating unit of any one of claims 9 to 11~~ heat treatment apparatus of claim 9, wherein the quartz tube is bent.

Claim 13 (Currently Amended): The ~~heating unit of any one of claims 9 to 12~~ heat treatment apparatus of claim 9, wherein the quartz tube is divided and welded to a plurality of zones on the surface of the reflector plate.

Claim 14 (Currently Amended): The ~~heating unit~~ mounting table of claim 4 ~~or 5~~, wherein the quartz tube is bent.

Claim 15 (Currently Amended): The ~~heating unit of any one of claims 4, 5 and 14~~ mounting table of claim 4, wherein the quartz tube is divided and welded to a plurality of zones on the surface of the reflector plate.